REMARKS OF COMMISSIONER JESSICA ROSENWORCEL "BETTER MAPS, BETTER CONNECTIVITY: GETTING THE DATA TO CLOSE THE BROADBAND GAP" THE PEW CHARITABLE TRUSTS WASHINGTON, DC DECEMBER 11, 2018

Good morning. It's an honor to join you for an event that is about the power of good data. That's because for more than seven decades the Pew Charitable Trusts has been providing facts that fuel solutions for our greatest challenges.

Today we are here to talk about one of those challenges: broadband. From where I sit at the Federal Communications Commission, connecting this country with broadband is the central infrastructure challenge of our day. That's because I believe the future belongs to the connected. No matter who you are or where you live in this country, you need access to modern communications for a fair shot at 21st century success.

But the fact of the matter is that too many Americans lack access to broadband. Let's put a number on it. According to the FCC's last-published report, 24 million Americans lack access to high-speed internet service, with 19 million of them in rural areas. That's troubling. But last week the *New York Times* offered new numbers and they're problematic, too. It reported that the digital divide is wider than we think—a lot wider. It found that 162 million people across the country do not use internet service at broadband speeds.

There's a big delta between 24 million and 162 million. It needs explanation. We have to figure out what is going on because it is becoming abundantly clear we do not have an accurate understanding of where service is and is not in every corner of this country.

So where do we start? If you're here today, you've probably already figured it out. We start with mapping. So let me start with what the FCC is doing with mapping and offer some ideas about what we can do to improve our broadband picture.

I'll begin with our wired broadband map. Earlier this year the FCC announced that after more than three years it updated the National Broadband Map. So far, so good. A reboot was overdue.

However, the new map has serious errors. How do I know? Well, picture this. It's the morning after the FCC has announced this new national map for fixed broadband deployment. I dutifully sit down in my office, pull up to my computer, and head to the website to check it out. And it looks good! The map is color-coded with metro areas in deep blues to reflect population and deployment and the more remote areas are a pleasing palette of pale greens. There are ways to explore regions of the country, compare states, congressional districts, census areas, and Tribal lands. Plus, you simply type in your address and it retrieves a list of the providers in your area ready to serve. So I take a sip of my morning coffee. I'm game. I peck at my keyboard and enter the address where I live. Right now I live in Washington. It's one of the denser areas of

the country. More than that, it's near downtown, in one of the denser areas of the city. And I'm an FCC Commissioner. But when I looked up my house that morning I found it listed service that is not available where I live. You can go ahead and plug in your address. You might find the same thing happens to you.

Our wired broadband map has problems. So it's good news that in the Consolidated Appropriations Act Congress set aside \$7.5 million in funds for the Department of Commerce to work on the National Broadband Map. Amen. It needs work. I hope those funds will be used to improve what we have today at the FCC. Because what we have is a start—but it's nowhere near as precise as it needs to be.

Getting it right matters. Because we cannot manage what we do not measure. If we don't have proper maps, we will not be able to target policy solutions effectively. The FCC distributes billions of dollars each year to help accelerate the build-out of broadband so we can connect all our communities. It's irresponsible for the agency to do so without having a truly accurate picture of where those resources should go.

This is true for the FCC wired map I just discussed. It's also true for the FCC wireless map. To understand where wireless mapping stands, you need to know a bit about the Mobility Fund. The Mobility Fund is part of the broader FCC universal service effort to support wireless communications in areas of the country that are at greatest risk of falling behind. The Mobility Fund is poised to distribute over \$4.5 billion over the next decade to help with wireless deployment in places that lack up-to-date services today. But because the National Broadband Map wasn't up to the task, the FCC created a special process to come up with a new wireless map just for this program. The first iteration of that wireless map was introduced earlier this year. But it was obvious from the get-go that the map had deep flaws. It overstated signal strength in rural areas and understated where universal service support is needed to ensure communities are not left behind.

So the FCC kicked off a challenge process to improve the wireless broadband map. Here's where good intention met poor execution. Because challenging the data in our wireless map was not for the faint of heart. To do so, you needed to be a wireless provider; local, state, or Tribal government official; or an interested party who received a special waiver from the FCC to be part of the process. Then you needed to set up an account at the Universal Service Administrative Company. Next, you needed to purchase a range of phones from different carriers with different service plans, and march around in the challenged area, recording tests for speed, signal strength, and latency at every .8 kilometer. On top of that, you were required at every test point to keep tabs on the make and model of the device used, as well as the international mobile equipment identity number. Tests were permitted only between 6:00 am and midnight. When completed, they needed to be uploaded to a grid online and certified by an engineer or government official.

Exhausted by that description? I know I am. Every time I review this I think this can't be the only way to build a national wireless map. The burdens on challengers are too great, the potential for incorrect data is too high, and the likelihood that we get these maps wrong is all too real

I'm not the only one who has this concern. At the last FCC oversight hearing, on a bipartisan basis, members of the Senate took us to task for the failings of our wireless broadband map. Arguably one member of the oversight committee did it best when he simply proclaimed that our maps "stink."

I'll co-sign that. So what do we do about it? For starters, the FCC Chairman announced last week that he was starting an investigation into one or more carriers responsible for the data in the agency's initial wireless maps. It turns out the information we had in the initial map may have been faulty from the start.

This investigation is a welcome development, but I'll be blunt: we have a mess on our hands. We have more work to do and while this investigation proceeds, we have a golden opportunity to revisit our wireless deployment data and rethink how we populate our maps.

In the interest of keeping is simple, I've distilled my ideas for a do-over down to the three C's of broadband cartography. So here it goes.

The first c is coordination. Policymakers need to work collaboratively across all levels of government to get our maps right. Like I said at the start, the Department of Commerce has new funds from Congress. It's essential they are used to improve what we already have at the FCC. But it's more than that. The FCC and the Department of Commerce should be working with the Department of Agriculture and learning what the Rural Utilities Service knows about broadband deployment in the communities it serves. We should be looking for data from our state counterparts at public service commissions, and other state and local efforts tasked with developing broadband data. This is an all-hands effort. No one authority can do this alone.

The next c is for correct. We need to put a premium on accuracy. We need to take all the facts we assemble and find ways to ensure that they are consistent so that comparisons between areas with and without service are just and useful.

The next c is for creative. We need to explore new ideas about how we can improve our maps. It's time to be innovative and consider any idea that can help us get this effort going. I'll start.

The FCC has already committed to having the Universal Service Administrative Company test and validate the deployments of carriers that use the Mobility Fund to provide service. Why not give them a role validating the data before we make the funds available to carriers? Think of it as a Mobility Fund pre-auction audit.

Next, the FCC can mobilize other resources it has at its disposal. The agency has more than a dozen offices across the country, from New York to New Orleans and Dallas to Denver. We can use these offices to spot check the data in our existing maps. On top of that, more than 200,0000 volunteers have downloaded the FCC's Speed Test app to test their wireless broadband connection. The agency needs to find a way to put this information to use.

Creativity also requires thinking anew about federal infrastructure. We could start a pilot project with postal trucks and have them collect wireless deployment data as they go about their routes in rural communities. We could survey other widely dispersed infrastructure and develop similar efforts.

Finally, we need to fully embrace crowdsourcing. No matter who you are or where you live, you probably have a story to tell—about how service stops short of your street, about how speeds are not what are commercially reported, about how you're still waiting for deployment that was promised long ago. It's time to use the wisdom of the crowd to get our maps right. Because there are people across the country who want to help, people who are willing to participate. How do I know? I informally tested this proposition a while back. I set up an e-mail inbox—broadbandfail@fcc.gov —to collect this data and hundreds of people wrote in to offer ideas, complain, and have their say.

What I take from that experience is that the best broadband map is not going to be built by one authority in Washington, it is going to be built by all of us. The best map will be coordinated, correct, and creative. It will be a Citizens Broadband Map. And the time to start building it is right now.

Thank you.